STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No.** LA0120243; **AI** 122552; **PER20040001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

I. **THE APPLICANT IS:** Guste Island Utility Company
Guste Island Wetland Assimilation Project
845 Galvez Street
Mandeville, LA 70448

II. **PREPARED BY:** Christopher K. Bertrand

DATE PREPARED: July 17, 2007

III. **PERMIT ACTION:** Issue LPDES permit LA0120243, AI 122552; PER20040001

Revised LPDES application received: February 6, 2006

IV. **FACILITY INFORMATION:**

A. The application is for the discharge of treated sanitary wastewater from a privately owned treatment facility serving the Guste Island Estates, Timberlane Subdivision, Belle Pointe Subdivision, a proposed residential development, and flow from a residential area previously served by S.E.L.A.

B. The permit application did not indicate the receipt of industrial wastewater.

C. The facility is located on Guste Island Road off of Highway 22 in Madisonville, St. Tammany Parish

D. The treatment facility consists of a two (2) cell facultative lagoon eight (8) feet deep with detension times ranging from 25 to 180 days. Followed by a chlorine contact chamber for disinfection and sulfur dioxide for dechlorination. Effluent is then discharged to a 274 acre wetland restoration site.

E. Location:

Front Gate:	Latitude 30° 25' 22" North Longitude 90° 12' 57" West
Outfall 001 Discharge:	Latitude 30° 24' 04" North Longitude 90° 13' 08" West
Description:	treated sanitary wastewater
Design Capacity:	0.6 MGD

Type of Flow Measurement which the facility is currently using:

Continuous Recorder with V-Notch Weir

There is only one outfall. The Water is distributed via a header system over the upper end of the wetland site and flows southerly toward the receiving canal. The header system will ensure that the treated effluent is spread evenly over the wetland surface.

V. RECEIVING WATERS:

Subsegment 040803, Lower Tchefuncte River – From La. Hwy. 22 to Lake Pontchartrain (Estuarine), is listed on LDEQ's Final 2004 303(d) List as impaired for organic enrichment/low DO, pathogen indicators, and mercury. To date no TMDLs have been completed for this waterbody. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL. Until completion of TMDLs for the Lake Pontchartrain Basin, those suspected causes for impairment which are not directly attributed to the sanitary wastewater point source category have been eliminated in the formulation of effluent limitations and other requirements of this permit. Additionally, suspected causes of impairment which could be attributed to pollutants which were not determined to be discharged at a level which would cause, have the reasonable potential to cause or contribute to an excursion above any present state water quality standard were also eliminated.

Organic Enrichment/Low DO

To protect against the potential for oxygen consuming pollutants that could cause instream DO problems, and for the discharges of organic materials at levels exceeding state water quality standards, BOD_5 limitations have been established in the general permit.

Pathogen Indicators

To protect the receiving waterbody against high levels of pathogenic organisms, fecal coliform limitations have been established.

Mercury

The mercury impairment listed for subsegment 040803 applies only to those waterbodies specifically identified in LDEQ's Final 2004 Integrated Report, and not to the entire subsegment unless so specified. Because the discharge from this facility is not directly into the Lower Tchefuncte River – From La. Hwy. 22 to Lake Pontchartrain (Estuarine), mercury will not be addressed in permit development.

The designated uses and degree of support for Segment 040803 of the Lake Pontchartrain Basin are as indicated in the table below[1/]:

Overall Degree of Support for Segment	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Partial Supporting	Non-Supporting	Full Supporting	Non-Supporting	N/A	N/A	N/A	N/A

[1/]The designated uses and degree of support for Segment 040803 of the Lake Pontchartrain Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 040803 of the Lake Pontchartrain Basin, is listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated September 29, 2006 from Watson (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mr. Christopher K. Bertrand
Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Final Effluent Limits:

OUTFALL 001 (Discharge into the Guste Island Restoration Wetlands; thence into a local canal to a pump station to High Bridge Canal; thence into Tchefuncte River; thence into Lake Pontchartrain)

DESIGN CAPACITY is 0.6 MGD

Systems utilizing wetland assimilation are given secondary limits. LAC 33:IX.711.D.2.a, states that facilities with treatment equivalent to Secondary Treatment, such as an oxidation pond system are given 30 – 45 mg/l BOD_5 and 90 mg/l TSS (30-day average) levels of treatment. The secondarily treated wastewater discharged into the wetlands provides for the introduction of nutrient rich wastewater and sediments. Both are beneficial to the wetlands in that they stimulate productivity, in the form of increased vegetative growth, and also counter the subsidence rate of the wetland. Additionally, wetlands are known to assimilate the nutrient levels present in secondarily treated wastewater to their advantage.

There is one outfall, in which the water is distributed via a header system over the upper end of the wetland site and sheet flows southerly toward the receiving canal. The header system will ensure that the treated effluent is spread evenly over the wetland surface.

Final limits shall **BEGIN** on the effective date of the permit and **EXPIRE** on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD_5	150	30 mg/l	45 mg/l	Limits are based on secondary treatment for sanitary wastewater in accordance with LAC33:IX.711D.2.b.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
TSS	450	90 mg/l	135 mg/l	Limits are based on secondary treatment for sanitary wastewater in accordance with LAC33:IX.711D.2.b.
Total Nitrogen	Report	Report	Report	Used to Compute the Loadings to the Wetlands
Total Phosphorous	Report	Report	Report	Used to Compute the Loadings to the Wetlands

Heavy metals and other toxins found in wastewater can have damaging effects on wetland systems. Research has found that the movement of heavy metals in the natural cycle of the wetland vegetation and sediments implies that wetlands are not final sinks for these metals. As a result, effluents with high metals concentrations such as would be introduced by industrial waste **should not** be applied to wetland systems. Due to the potential long-term, detrimental impacts from heavy metals, salts, biocides, and other toxins, wetland discharges should be limited primarily to domestic effluent. Therefore, **no significant industrial users with a waste stream other than sanitary should be added to the system without the written permission of the Department, and possibly the requirement of an approved pretreatment program.**

Other Effluent Limitations:

1) **Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Secondary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 1000/100 ml and 2000/100 ml. However, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) **pH**

According to LAC 33:IX.2469.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.2645.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) **Solids and Foam**

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

WETLAND RESTORATION MONITORING

The five (5) year LPDES permits contain technology-based effluent limitations for BOD_5, TSS, and pH reflecting the best controls available. Where these technology-based permit limits do not protect water quality or the designated uses, additional water quality-based effluent limitations and/or conditions are included in the LPDES permits. State narrative and numerical water quality standards are used in conjunction with EPA criteria and other available toxicity information to determine the adequacy of technology-based permit limits and the need for additional water quality-based controls.

The state has established a narrative water quality criterion, which states that:

"No substances shall be present in the waters of the state or the sediments underlying said waters in quantities that alone or in combination will be toxic to human, plant, or animal life or significantly increase health risks due to exposure to the substances or consumption of contaminated fish or other aquatic life." (*Louisiana Surface Water Quality Standards*, LAC Title 33, Part IX, Chapter 11, Section 1113.B.5.)

However, the State of Louisiana has set the following specific criteria for protection of the receiving Restoration Wetlands (Guste Island). There shall be no:

- **SIGNIFICANT DECREASE IN FAUNAL SPECIES DIVERSITY**
- **SIGNIFICANT CHANGE IN THE INITIAL SPECIES PLANTING PERCENTAGE (%)**
- **SIGNIFICANT INCREASE IN INVASIVE SPECIES**

The EPA document *Biological Criteria: National Program Guidance for Surface Waters*, discusses the Clean Water Act and states that "the general authority for biological criteria comes from Section 101(a) of the Act which establishes as the objective of the Act the restoration and maintenance of the chemical, physical, and biological integrity of the Nation's waters, including wetlands. To meet this objective, water quality criteria must include criteria to protect biological integrity. Section 101(a)(2) includes the interim water quality goal for the protection and propagation of fish, shellfish, and wildlife." Biological integrity is functionally defined in this EPA manual as "the condition of the aquatic community inhabiting the unimpaired waterbodies of a specified habitat as measured by community structure and function." The importance and function of wetlands include, but are not limited to the following: erosion and flood control, saltwater intrusion control, water quality enhancement, habitat for threatened and endangered species, wildlife habitat, nutrient material cycling, recreation and aesthetics.

Natural wetland loss is a problem in Louisiana. This problem is caused by insufficient sedimentation and relative sea level rise each year. The introduction of nutrient rich wastewater to natural wetlands is beneficial in that it stimulates productivity in the wetland. This productivity promotes vertical accretion through increased organic matter deposition and the formation of soil through increased root growth. This vertical accretion helps maintain the wetlands, despite the rising water levels. Additionally, the total suspended solids, provided by the wastewater, also increase the sediment level in the wetland.

During the 1950's a massive land conversion project was initiated on the site. Levees, drainage canals, and pumps were constructed, which isolated this property from adjacent marsh/swamp complexes and converted the site to a hydraulically, mechanically dependent agriculture area. Land use conversion was completed in the 1960's, and since that time, the property has been used for agriculture, hunting, and residential development. Presently the site is agriculturally idle and is being considered for a number of development projects. Including the site in a mitigation bank, along with incorporation into the Guste Island Development Wetland Assimilation Project, will ensure the site is maintained as historical forested wetland and will eliminate the potential for development.

Although the introduction of treated sanitary wastewater into natural wetlands renders benefits to the wetland system, changes to the system will occur. Therefore, it is important to address issues, which will indicate the extent of these changes and to determine if the changes are acceptable.

While standard biomonitoring indicates affects on organisms found in free flowing streams and rivers, a biological monitoring schedule broader in scope, and more specific to the wetland ecosystem, than standard biomonitoring, will provide a more direct indication of change in functions of natural wetland system as a whole. However, in the case of a wetland restoration project the normal wetland floral monitoring is delayed until the planted vegetation reaches sufficient size for productivity measurements.

GUSTE ISLAND RESTORATION PLAN

The Guste Island Development Wetland Restoration Plan will restore bottomland hardwood and swamp habitat by planting a variety of species according to the following plan:

- The site will be prepared by bush-hogging or burning during the fall of 2006 – 2007.
- Species planted will be those indigenous to adjacent bottomland hardwood/swamp including bald cypress, tupelo gum, willow oak, cow oak, laurel oak, green ash, and persimmon.
- Seedlings will be purchased from a reputable nursery and will be kept cool, moist and out of direct sunlight. Seedlings will not be held for more than 14 days in cold storage prior to planting. Additionally, seedlings will be protected from freezing prior to planting.
- Planting will be conducted between January 15 and February 28, and will occupy a 10 foot x 12 foot spacing.
- Seedling roots shall be protected from exposure during planting operations to prevent them from drying out. Proper use of seedling planting bags will insure this protection.
- Survival rate of 50% will be required. Replanting will be conducted if the 50% criteria is not met after one year.
- Monitoring of the survival rate will be accomplished by marking a 5% sample of all plantings. Sample plots will be established by Guste Island Mitigation Bank.
- Firebreaks will be established around the perimeter of the planting area or at intervals deemed necessary.
- Exotic vegetation will be monitored and steps taken to control invasive species.

The following parameters are proposed to be sampled and monitored for the specified wetland component at all three (3) wastewater management areas and the two (2) control areas:

- **Sampling and classifying the flora** planted and determining percentage of total cover for each vegetative species. The sampling will provide information on whether dominance and species diversity of the community is being maintained.
- **Growth studies of vegetative productivity**, which will provide an indication of health and vigor of the plant community.
- **Water stage** is a gaged measurement of the water depth, which will assist in determining stress in the wetlands from hydrologic loadings and will determine the existence of a zone of influence resulting from wastewater applications. The zone around the discharge serves to assimilate the wastewater most effectively. This zone grows larger as wastewater continues to be discharged and the assimilative capacity of the immediate area becomes saturated.
- **Metals and nutrient data from plant tissue samples**, which will identify excesses or deficiencies that could become problematic.
- **Sediment analysis for metals, and nutrients**, which will indicate whether or not metals are bound and buried in the sediments, and nutrients assimilated.
- **Corresponding analysis of surface water** must be made to provide a comparison of water quality in the vicinity of the discharge and at increasing distance from it.

Compared to data from the baseline study and the control area, the effects of the discharge on the biological integrity (as defined above) may be accurately assessed.

The wetland monitoring procedures stipulated as a condition of this permit are as follows:

The permittee shall submit the results of any wetland monitoring testing performed in accordance with the LPDES Permit LA0120243 in the Annual Report:

PARAMETER	WETLAND COMPONENT		
	FLORA	SEDIMENT	SURFACE WATER
Species Classification and Survival	A		
Growth Studies	A_1		
Water Stage			M
Metals Analysis: Mg, Pb, Cd, Cr, Cu, Zn, Fe, Ni, Ag, Se	P_1	P_1	S
Nutrient Analysis I: TKN, TP	P_1	P_1	S
Nutrient Analysis II: NH_3N, NO_2N, NO_3N, PO_4		P_1	S
Others: BOD_5, TSS, pH, Dissolved Oxygen			S

Water quality will be monitored by taking water samples along the path of flow of the effluent in the Wetland Management Area and from one or more control sites.
If loading rates exceed 15 g/m^2/yr total nitrogen or 4 g/m^2/yr total phosphorus, then either the loading rates must be reduced or the assimilation area must be increased.

Sampling in the **WASTEWATER MANAGEMENT AREA** must be conducted as follows:

Collection of a minimum of three samples per site in each of three sites: 1) approximately 100' from the discharge point, 2) midway, and 3) at the end of the restoration area.

Sampling for the **CONTROL AREA** must be conducted as follows:

Collection of a minimum of three samples per site in each of the two sites. All three samples will be taken from a site or sites similar to the wastewater management area.

A: **ANNUALLY.** Sample once per year at all three (3) WASTEWATER MANAGEMENT AREAS and the two (2) CONTROL AREAS and included in the yearly report.

A_1 – Tree height measured in the restoration area only.

M: **MONTHLY.** Samples should be taken at all three (3) WASTEWATER MANAGEMENT SAMPLE AREAS and the two (2) CONTROL AREAS each month and included in the yearly report.

P: **PERIODICALLY.** Sampling must be made once during March through May, and once during September through November in the fourth year of the permit period for all three (3) WASTEWATER MANAGEMENT AREAS and all (2) CONTROL AREAS.

P_1 – Sample preservation, handling, and analysis must meet the specifications of the Test Methods for Evaluating Solid Waste Physical/Chemical Methods, third edition (EPA Publication Number SW-846, 1986, or most recent revision) or an equivalent substitute as approved by the administrative authority.

S: **SEMI-ANNUAL.** Sample twice per year: once during September through February, and once during March through August (sampling events must be a minimum of 4 months apart) for all three (3) WASTEWATER MANAGEMENT AREAS and the two (2) CONTROL AREAS and included in the yearly report.

SAMPLING PROCEDURES

Sampling procedures to be used during the wetland monitoring phase. (The Use of Louisiana Swamp Forests for Application of Treated Municipal Wastewater: Standard Operating Procedures for Monitoring the Effects of Effluent Discharge. John W. Day, Jr., Joel Lindsey, Jason N. Day, and Robert R. Lane, Comite Resources, Inc. Used with the permission of Dr. John W. Day, Jr., March 14, 2003.)

WATER QUALITY

1. **Dissolved oxygen and water temperature:** is measured using a Yellow Springs Instrument Co. meter or an ORION Model 820 Dissolved Oxygen meter or equivalent. The probe will be calibrated within four hours of use with a known standard (100% air saturation).

2. **pH & TDS:** Measurements of pH and TDS (Total Dissolved Solids) are made in the field using a Corning Checkmate M90 Field System or equivalent. Water samples will be collected in 500 ml polyethylene bottles and returned to the laboratory where pH will again be measured in the lab using a Jenco Markson pH meter, Model 6100 or equivalent.

3. **Nutrients:** Discrete water samples will be taken 5 to 10 cm below the water surface with effort taken not to stir bottom sediments or include any film that may be present on water surface. Samples are collected in 500 ml acid washed polyethylene bottles. The samples will be immediately stored at 4°C, on ice, for preservation. The samples will be transported to an analytical laboratory, and within 24 hours filtered and sub-sampled. Samples analyzed for $NO_2 + NO_3$, NH_4 and PO_4 will be filtered in the laboratory using 0.45 um Whatman GF/F glass fiber filters or equivalent, and unfiltered samples will be sub-sampled into 125 mL bottles. Both filtered and unfiltered samples will be frozen until analysis. The samples will be analyzed for nitrite + nitrate ($NO2+NO_3$-N), ammonium (NH_4-N), total nitrogen (TN), total phosphorus (TP), and phosphate (PO_4-P) by an EPA and DEQ approved analytical laboratory using Standard Methods.

4. **Total Suspended Solids:** TSS will be determined by filtering 100-200 mL of sample water through re-rinsed, dried and weighed 47 mm 0.45 um Whatman GF/F glass fiber filters. Filters will then be dried for 1 hr at 105° C, weighted, dried for another 15 minutes, and reweighed for quality assurance (Standard Methods 1992).

5. **Biological Oxygen Demand:** BOD samples will be collected in standard 300 ml glass BOD bottles. BOD_5 analysis will be from water samples collected in 500ml polyethylene bottles, stored on ice and taken to the laboratory for analysis. Initial D.O. will be measured within 24 hours. Final D.O. will be measured after 5 days of incubation at 20°C. Measurement of BOD is the responsibility of the facility.

6. **ICP Analysis:** Water samples will be collected from the effluent pipe and surface water in the treatment and control area for ICP and IC analysis. The following will be measured: Mg, Pb, Zn, and Cr. The results of the ICP and IC analysis will be used in reporting the metals and nutrient parameters.

7. **Coliform Analysis:** Fecal coliform (i.e. *Escherichia coli)* will be tested using membrane filtration as a field preparation, and then sent to an EPA certified laboratory for analysis. Ten ml of sample water will be passed through a 0.45 micron filter. The filter will be stored in a sterile petri dish and brought within 8 hrs to a certified laboratory for analysis.

8. **Statistical Analysis:** One-way analysis of variance analysis will be carried out to compare treatment and control area parameters using statistical software. An alpha probability level of <0.05 will be used to define a significant difference. Comparisons of means with significant ANOVA tests will be made using Tukey-Kramer Honestly Significant Difference (HSD) test (Sall and Lehman 1996). Other statistical tests may be used as appropriate.

SOILS

1. **Sediment Cores**: At least one sediment core will be taken from each study site (Treatment & Control) with a 7.5 cm stainless steel corer. Following the removal of large litter debris, the top 10 to 20 cm of the samples will be separated by horizon, dried, ground and analyzed. Parameters measured will include: pH, electrical conductivity (EC), Mg, Pb, Cd, Cr, Cu, Zn, Fe, Ni, Ag, Se, NH_3-N, NO_2+NO_3-N, PO_4-P, TKN, and TP. All elemental analyses will be done using an inductively coupled argon plasma quantometer (ICP). Results will be reported as the average of duplicate analyses that are within a 10% confidence interval. The results will be based on oven dry weight.

VEGETATION

To sample forest vegetation, three or more subplots should be established at each main plot. Normally, main plots will be established at a near, mid, and outlet locations in the Assimilation site, and another main plot established at a Control site. Each plot will be orientated perpendicular to the hydrological gradient.

1. **Tree Species Composition:** The relative importance of each major tree species in both the Assimilation and Control areas will be based on the density (total number), dominance (basal area), and frequency of occurrence in each of the plots using equations 1and 2 (Barbour et al. 1987).

Relative density = (individuals of a species)/(total individuals of all species) (1)
Relative frequency = (frequency of species)/(total frequency of all species in area) (2)

2. **Nutrient and Metals Analysis of Green Leaves:** Green leaf samples should be collected during the last year of the monitoring from the major species in the treatment and control areas, once during March through May and once during September through November. Samples will be oven-dried at 70^{B}C for at least 48 hours, ground in a Wiley mill to pass a 40 mesh screen, and stored in whirl-pak bags. Samples will be analyzed in the laboratory for Mg, Pb, Cd, Cr, Cu, Zn, Fe, Ni, Ag, Se, TKN and TP. The tissue analyses should be done by a wet digestion method.

3. **Marsh Vegetation Production:** Net production in areas dominated by non-woody herbaceous vegetation will be determined by end of season live (EOSL) biomass analysis. Sampling should be conducted during the last week of September or the first week of October. At least five 0.06 m^2 clip plots will be taken at each location using randomly placed quadrants. Vegetation within the quadrant will be cut as close to the surface as possible, stored in labeled paper bags, brought back to the laboratory, and refrigerated until processing. Live material will be separated from dead, and dried at 60^{B} C to a constant weight. All data will be presented on a live dry weight per square meter basis (g dry wt m^{-2}).

X. PREVIOUS PERMITS:

LPDES Permit No. LAR10D719*: Issued: October 23, 2006
Expires: September 30, 2009

* Storm water general permit for construction activities five (5) acres or more

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:

A) Inspections

A review of the files indicates that an incident related inspection was performed at the facility on or about January 16, 2007.

The incident description was noted as terrible odors being emitted from the lift station.

The investigation revealed that the lift station did not smell at the time of the inspection. The lift station appeared to be sealed to prevent odors from escaping.

B) Compliance and/or Administrative Orders

A review of the files indicates that there are no enforcement actions administered against this facility.

C) DMR Review

There are no Discharge Monitoring Reports on file for this facility.

XII. ADDITIONAL INFORMATION:

The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon water quality studies. These studies may indicate the need for more advanced wastewater treatment. Studies of similar dischargers and receiving water bodies have resulted in monthly average effluent limitations of 5 mg/l $CBOD_5$, and 2 mg/l NH_3-N. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

The Monitoring Requirements, Sample Types, and Frequency of Sampling as shown in the permit are standard for facilities of flows between **0.50** and **1.00** MGD.

Effluent Characteristics	Monitoring Requirements	
	Measurement Frequency	Sample Type
Flow	Continuous	Recorder
BOD_5	1/week	3 Hr. Composite
Total Suspended Solids	1/week	3 Hr. Composite
Fecal Coliform Bacteria	1/week	Grab
pH	1/week	Grab
Total Nitrogen	1/quaterly	3 Hr. Composite
Total Phosphorous	1/quaterly	3 Hr. Composite

Pretreatment Requirements

Due to the absence of categorical users, it is recommended that LDEQ Option 1 Pretreatment Language be included in LPDES Permit LA0120243. This language is established for municipalities that do not have either an approved or required Pretreatment Program. This recommendation is in accordance with 40 CFR Part 403 regulations, the General Pretreatment Regulations for Existing and New Sources of Pollution contained in LAC Title 33, Part IX, Subpart T and the Best Professional Judgment (BPJ) of the review (Melissa Reboul).

XIII TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a new permit for the discharge described in this Statement of Basis.

XIV REFERENCES:

Louisiana Water Quality Management Plan, Vol. 10, "Wasteload Allocations and Discharger Inventory", Louisiana Department of Environmental Quality, 1992.

Louisiana Water Quality Management Plan, Vol. 5-B, "Water Quality Inventory", Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards", Louisiana Department of Environmental Quality, 1999.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 23 - "The LPDES Program", Louisiana Department of Environmental Quality, 1999.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

Conner, W. H., J. W. Day, Jr., and J. D. Bergeron. 1989. A Use Attainability Analysis of Wetlands for Receiving Treated Municipal and Small Industry Wastewater: A Feasibility Study Using Baseline Data From Thibodaux, Louisiana, Center for Wetlands Resource, Louisiana State University, Baton Rouge, Louisiana 78 p.

Day, J.W., J. Rybczyk, W. Conner, P. Delgado, S. Feagley, I. Hesse, R. Pratt, A. Westphal, and X. Zhang. February 20, 1998. A Use Attainability Analysis for the Use of Swamp Forests Near Thibodaux, Louisiana for Application of Treated Municipal Wastewater: Monitoring the Effects of the Discharge 1992-1997, Louisiana, Coastal Ecology Institute, Louisiana State University, Baton Rouge, Louisiana.

Day, J. W., A. M. Breaux, S. Feagley, P. Kemp, and C. Courville. 1994. A Use Attainability Analysis of Long-term Wastewater Discharge on the Cypriere Perdue Forested Wetland at Breaux Bridge, Louisiana, Coastal Ecology Institute, Louisiana State University, Baton Rouge, Louisiana.

Day, J. W., J. Rybczyk, R. Pratt, A. Westphal, T. Blahnik, G. Garson, and P. Kemp. 1997 a. A Use Attainability Analysis for Long-term Wastewater Discharge on the Ramos Forested Wetland at Amelia, Louisiana Coastal Ecology Institute, Louisiana State University, Baton Rouge, Louisiana.

Day, J. W., J. Rybczyk, R. Pratt, M. Sutula, A. Westphal, T. Blahnik, P. Delgado, P. Kemp, A. J. Englande, C. Y. Hu, G. Jin, and H. W. Jeng. 1997 b. A Use Attainability Analysis for Long-term Wastewater Discharge to the Poydras Verret Wetland in St. Bernard Parish, Louisiana, Coastal Ecology Institute, Louisiana State University, Baton Rouge, Louisiana.

Day, J. W., A. Westphal, C. Brantley, R. Pratt, B. Perez, and J. N. Day. 1999. A Use Attainability Analysis for municipal Wastewater Discharge to Coastal Wetlands at Mandeville, Louisiana, Coastal Ecology Institute, Louisiana State University, Baton Rouge, Louisiana 41 p.

Day, J.W., Lane, R.R., Lindsey, Joel, and J.N. Day 2005. Broussard Wetland Wastewater Assimilation Use Attainability Analysis (UAA), Comite Resources, Inc.

Hellawell, J. M. 1986. Biological Indicator of Freshwater Pollution and Environmental Management. Elsevier, London.

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